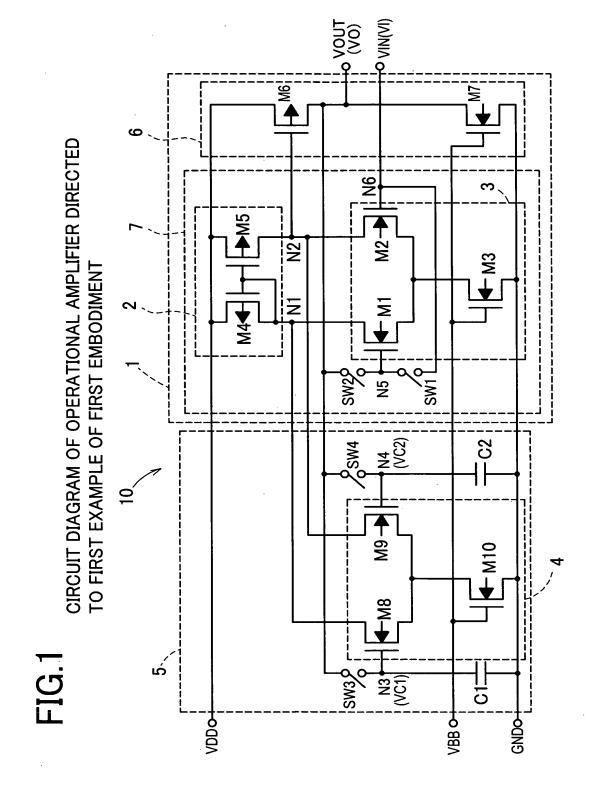
Inventor: KASAI, et al. Appln. No.: Unknown Docket No.: 024016-00078



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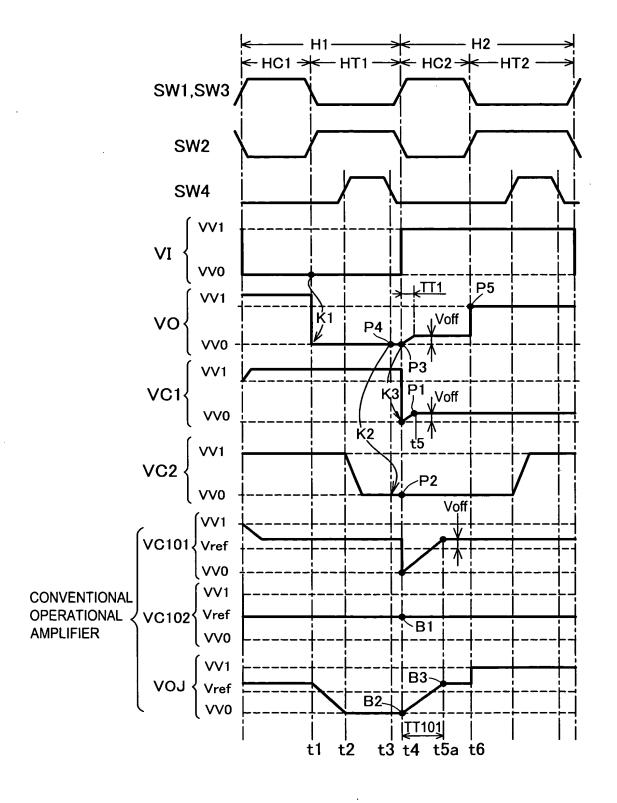
DEVICE

Inventor: KASAI, et al. Appln. No.: Unknown Docket No.: 024016-00078

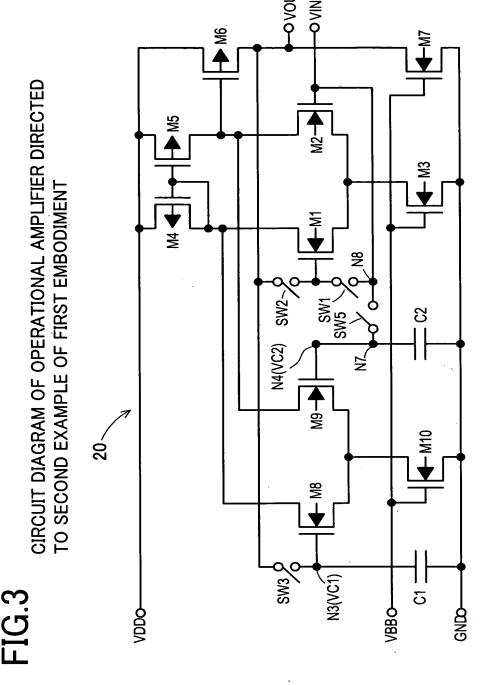
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FIG.2

TIMING CHART OF OPERATIONAL AMPLIFIER DIRECTED TO FIRST EXAMPLE OF FIRST EMBODIMENT

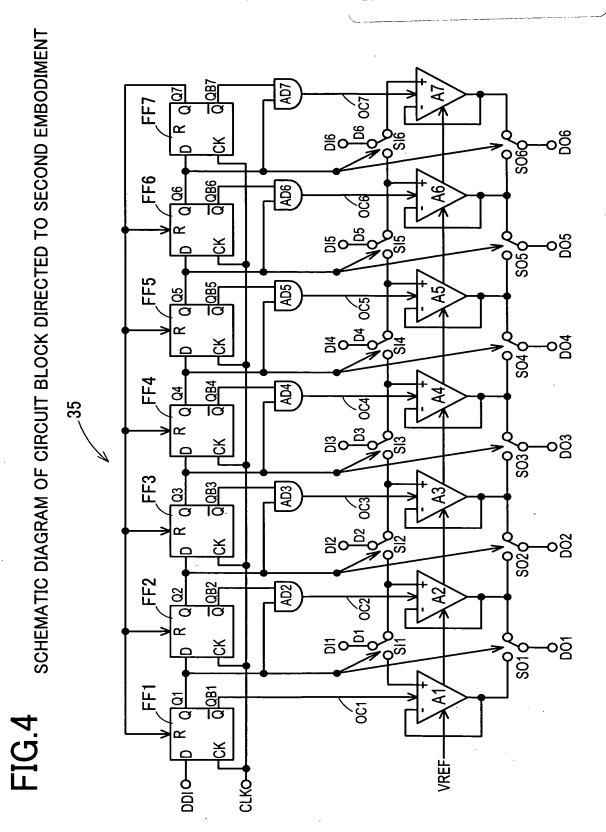


Inventor: KASAI, et al. Appln. No.: Unknown Docket No.: 024016-00078



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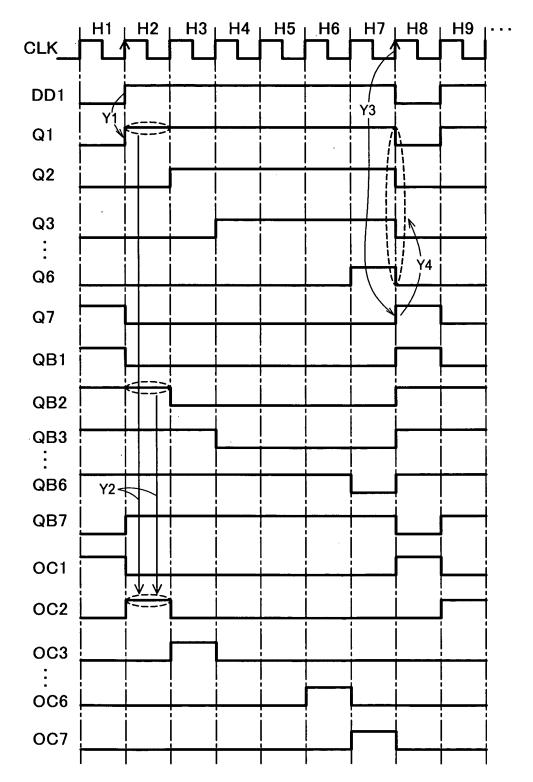
DEVICE

Inventor: KASAI, et al. Appln. No.: Unknown Docket No.: 024016-00078

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FIG.5

TIMING CHART OF CIRCUIT BLOCK DIRECTED TO SECOND EMBODIMENT



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Title: OPERATIONAL AMPLIFIER, LINE DRIVER, AND LIQUID CRYSTAL DISPLAY

DEVICE Inventor: KASAI, et al. Appln. No.: Unknown Docket No.: 024016-00078

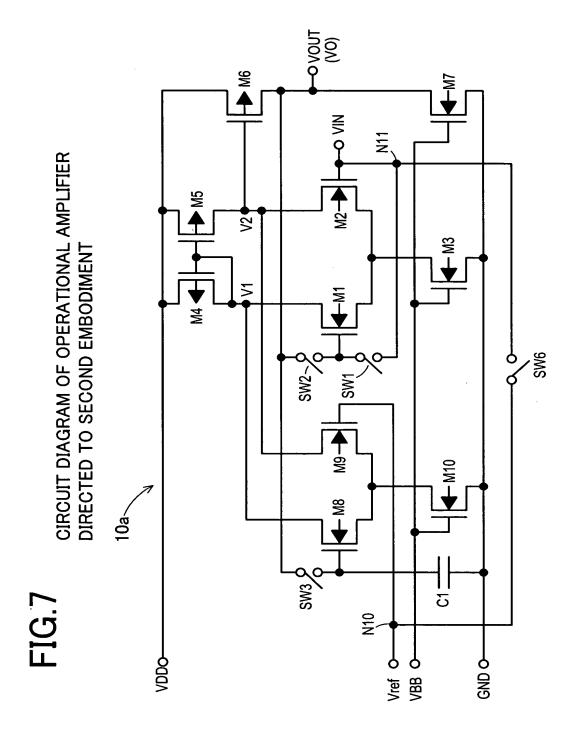
SWITCH OPERATION TABLE (1) OF OPERATIONAL AMPLIFIER DIRECTED TO SECOND EMBODIMENT

OPERATIONAL AMPLIFIER

	·									
A7	90	90	90	90	90	90	OFFSET	9Q	90	•••
A6	D5	D5	D5	D5	, D5	OFFSET CANCEL	D6	D5	D5	• • •
A5	D4	D4	D4	D4	OFFSET CANCEL	D5	D5	D4	D4	
A4	D3	D3	, D3	OFFSET CANCEL	D4	D4	D4	D3	D3	
A3	D2	, D2	OFFSET CANCEL	D3	D3	D3	D3	D2	D2	
A2	D1	OFFSET CANCEL	D2	D2	D2	D2	D2	D1	OFFSET	
IA I	OFFSET CANCEL	D1	10	D1	10	D1	D1	OFFSET CANCEL	D1	
	H	H2	Н3	H4	9H	9H	Н7	H8	6Н	• • •

ONE HORIZONTAL PERIOD

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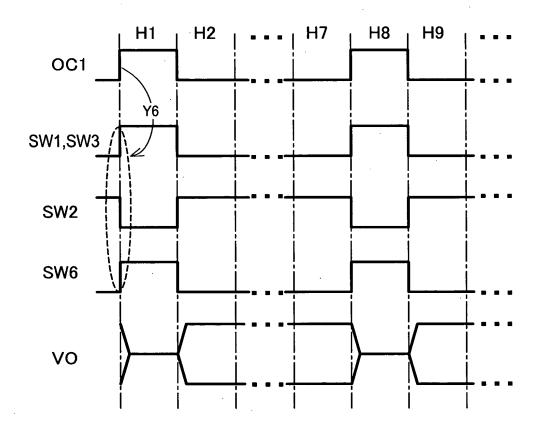
DEVICE

Inventor: KASAI, et al. Appln. No.: Unknown Docket No.: 024016-00078

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FIG.8

TIMING CHART OF OPERATIONAL AMPLEFIER DIRECTED TO SECOND EMBODIMENT



DEVICE

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FIG.9

SWITCH OPERATION TABLE (2) OF OPERATIONAL AMPLIFIER DIRECTED TO SECOND EMBODIMENT

OPERATIONAL AMPLIFIER

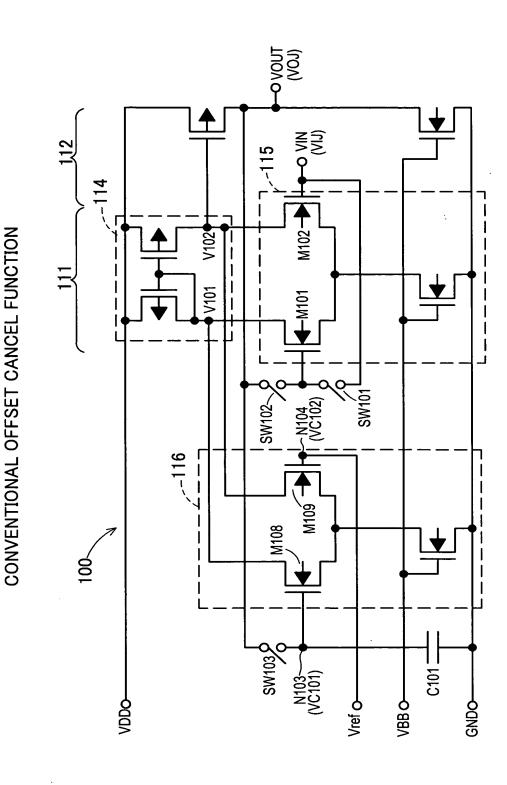
	A1	A2	A3	A4	A 5	A6	A7
H1	OFFSET CANCEL	D1	D2	D3	D4	D5	D6
H2	D1	OFFSET CANCEL	D2	D3	D4	D5	D6
Н3	D1	D2	OFFSET CANCEL	D3	D4	D5	D6
H4	D1	D2	D3	OFFSET CANCEL	D4	D5	D6
H5	D1	D2	D3	D4	OFFSET CANCEL	D5	D6
Н6	D1	D2	D3	D4	D5	OFFSET CANCEL	D6
H7	D1	D2	D3	D4	D5	D6	OFFSET CANCEL
H8	D1	D2	D3	D4	D5	OFFSET CANCEL	D6
Н9	D1	D2	D3	D4	OFFSET CANCEL	D5	D6
H10	D1	D2	D3	OFFSET CANCEL	D4	D5	D6
H11	₁D1	D2	OFFSET CANCEL	D3	D4	D5	D6
H12	D1	OFFSET CANCEL	D2	D3	D4	D5	D6
H13	OFFSET CANCEL	D1	D2	D3	D4	D5	D6
H14	D1	OFFSET CANCEL	D2	D3	D4	D5	D6
:	:	:	:	•	:	:	•

ONE HORIZONTAL PERIOD

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CIRCUIT DIAGRAM OF OPERATIONAL AMPLIFIER EQUIPPED WITH

FIG.10 PRIOR ART



DEVICE

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FIG.11 PRIOR ART

TIMING CHART OF OPERATIONALAMPLIFIER EQUIPPED WITH CONVENTIONAL OFFSET CANCEL FUNCTION

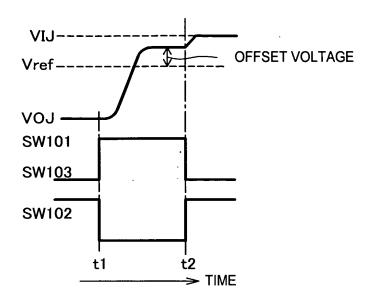
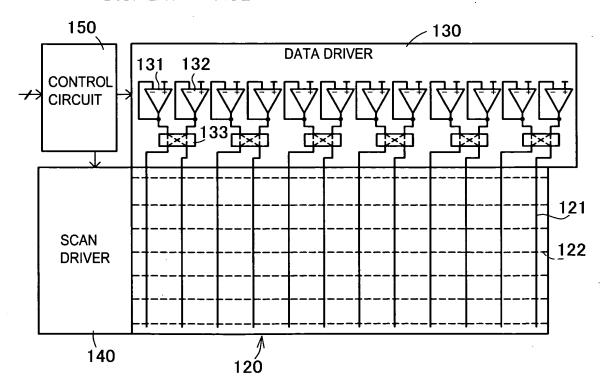


FIG.12

SCHEMATIC STRUCTURE OF LIQUID CRYSTAL DISPLAY DEVICE

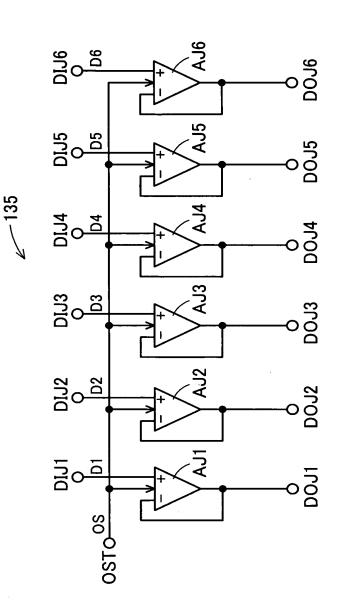


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DIAGRAM SHOWING STRUCTURE OF CONVENTIONAL LINE DRIVER

FIG.13 PRIOR ART



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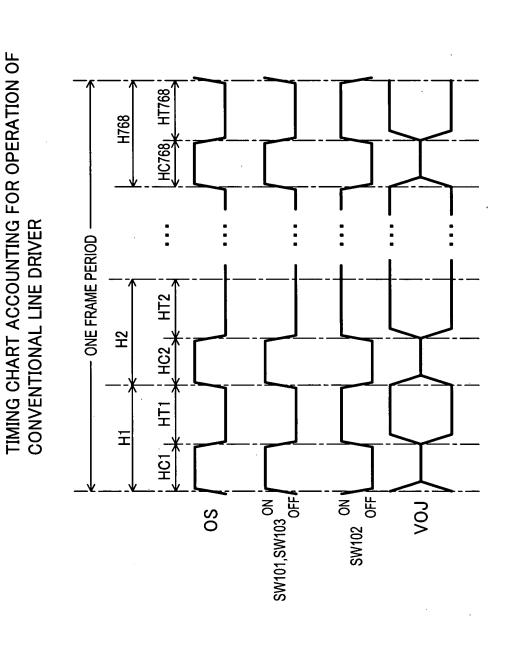


FIG.14 PRIOR ART